

Please kindly amend the claims as indicated below.

1. (Previously Presented) A method of transmitting auxiliary data in video encoding comprising:

- receiving first and second data;
- encoding said first data based on a state of at least one bit of said second data; and
- packaging said encoded first data and said second data into a single word; and
- communicating said single word.

2. (Previously Presented) The method of claim 1, further comprising DC balancing said first data.

3. (Previously Presented) The method of Claim 1, wherein encoding said first data further comprises determining whether said first data should be inverted.

4. (Previously Presented) The method of Claim 3, wherein encoding said first data further comprises comparing a state of inversion of said first data to said state of said at least one bit of said second data.

5. (Previously Presented) The method of Claim 4, wherein encoding said first data further comprises inverting said first data if said state of inversion of said first data does not match said state of said at least one bit of said second data.

6. (Previously Presented) The method of Claim 4, wherein encoding said first data bit further comprises not inverting said first data if said state of inversion of said first data matches said state of said at least one bit of said second data.

7. (Previously Presented) The method of Claim 1, wherein encoding said first data comprises determining an intermediate value for said first data.

8. (Previously Presented) The method of Claim 7, wherein encoding said first data further comprises comparing said intermediate value to at least one bit of audio data.

9. (Previously Presented) The method of Claim 8, wherein encoding said first data further comprises encoding said first data and said audio data if said state of inversion of said first data bit is equal to said at least one bit of audio data.

10. (Previously Presented) The method of Claim 7, wherein encoding said first data further comprises inverting said first data if said state of inversion of said first data does not match said state of said at least one bit of audio data.

11. (Previously Presented) The method of Claim 10, wherein encoding said first data further comprises encoding said inverted first data and said at least one bit of audio data.

12. (Currently Amended) A method of balancing a code word in a video encoder comprising:

receiving data;

determining a [desired] particular state [of] for said data; and

encoding said data based on the [desired state of] particular state for the data.

13. (Currently Amended) A method of balancing a code word in video encoder comprising:

receiving data;

determining a [desired state of] particular state for said data;

selecting a logic operation that will result in a state closest to said [desired state] particular state; and

performing said selected logic operation on at least a portion of said data.

14. (Previously Presented) The system of Claim 13, wherein performing said logic operation comprises performing an exclusive nor operation.

15. (Previously Presented) The system of Claim 13, wherein said desired state includes data having a strong 1 presence.

16. (Previously Presented) The system of Claim 13, wherein performing said logic operation comprises performing an exclusive or operation.

17. (Previously Presented) The system of Claim 13, wherein said desired state includes data having a strong 0 presence.

18. (Previously Presented) A system for transmitting auxiliary data in video encoding comprising:

a receiver adapted to receive first and second data;

an encoder adapted to encode said first data based on at least one bit of said second data;

a packaging device adapted to package said encoded first and second data into a single word; and

a communication device adapted to communicate said single word.

19. (Previously Presented) A system for transmitting auxiliary data in video encoding comprising:

an un-enhanced encoder;

an enhanced encoder;

an un-enhanced decoder adapted to communicate with said un-enhanced and enhanced encoders; and

an enhanced decoder adapted to communicate with said un-enhanced and enhanced encoders.

20. (Previously Presented) The system of Claim 19, wherein said enhanced decoder is adapted to communicate enhanced data word.

21. (Previously Presented) The system of Claim 19, wherein said un-enhanced encoder is adapted to communicate un-enhanced data word.